

Title (en)

COMPOSITE KEYSTONED BLADE TRACK

Title (de)

ZUSAMMENGESETzte KEYSTONE-SCHAUFELSPUR

Title (fr)

PISTE D'AUBE COMPOSITE À CLÉ DE VOÛTE

Publication

EP 3088664 B1 20190612 (EN)

Application

EP 16164265 A 20160407

Priority

- US 201562154461 P 20150429
- US 201562154400 P 20150429

Abstract (en)

[origin: EP3088664A1] A blade track for a gas turbine engine, the blade track (20) comprises a plurality of blade track segments (22) each comprised of ceramic-matrix composite materials and shaped to extend part-way around a central axis (A). Each blade track segment (22) includes opposing circumferential end faces (21, 23) and a radially outer surface (25) extending between the end faces. A composite-lock structure (24) is positioned to engage the outer surfaces (25) of the blade track segments (22). The composite-lock structure (24) includes at least one reinforcement fiber (52) of ceramic-containing material suspended in ceramic-matrix material. The blade track segments (22) are positioned circumferentially around the central axis (A) to form a ring. The end faces (21, 23) of the blade track segments (22) are engaged with one another, and the composite-lock structure (24) is configured to provide a radially-inward force toward the central axis against the blade track segments (22) such that each blade track segment (22) acts as a keystone to maintain the form of the ring.

IPC 8 full level

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